

M241 wait for #4 finish

Work Order ID 87714

87714

Page 1

July-27-12 9:07:30 AM

Item ID: D3608-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Lower Doubler

Start Date: 7/27/12

Start Qty: 2.00

2

Cust Item ID:

Required Date: 8/17/12

Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan: MLJ

Date: 12/07/27

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3608	C

100

0.00

100

Waterjet

FLOW WATER JET

Memo

0.00

FLOW CNC Waterjet

304 . 040 Polish

1-Cut as per Dwg D3608

Dwg Rev: C

Prog Rev: C

2-Debur if necessary

Use bricks

N/A

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

120

QC8- Inspect parts - second check

0.00

120

QC

Memo

0.00

Quality Control

DAS
16
9-89

12/09/29

①

2 0 Jm 12-8-28

2 0 Jm 12-8-28

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>						
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector			
Doc/Data <input type="checkbox"/>												
Equip/Tooling <input type="checkbox"/>												
Operator <input type="checkbox"/>												
Material <input type="checkbox"/>												
Setup <input type="checkbox"/>												
Other <input type="checkbox"/>												
Process <input type="checkbox"/>												
Supplier <input type="checkbox"/>												
Training <input type="checkbox"/>												
Unapproved <input type="checkbox"/>												
FAULT CATEGORY												
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <hr/> <hr/> <hr/>		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other <hr/> <hr/> <hr/>	

Work Order ID 87714

87714

Page 2

July-27-12 9:07:30 AM

Item ID: D3608-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Lower Doubler
 Start Date: 7/27/12 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 8/17/12 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Identify as per dwg & Stock Location: <u>175</u>	0.00	<u>SL</u>			<u>2</u>		<u>8</u>	<u>12/8/30</u>
150									
Packaging	Memo	0.00							
Packaging									
160	QC21- Final Inspection - Work Order Release	0.00							
160								<u>ML5</u>	<u>12/08/30</u>
QC	Memo	0.00							
Quality Control									<u>UMF</u> <u>12-08-30</u>

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

Picklist Print

July-27-12 9:07:30 AM

Page 1

Work Order ID: 87714

Parent Item: D3608-1

Parent Item Name: Lower Doubler

Start Date: 7/27/12

Required Date: 8/17/12

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A New Issue 07-03-26 JLM
 IPP Rev:B 08-10-15 preliminary issue DD verified by:EC
 IPP Rev:C 08-12-11 rev.A as per dwg DD verified by:EC IPP Rev:D 10.02.16 rev.B as
 per dwg DD verified by:EC IPP Rev:E 10.11.17 as per PC1 dwg DD verified by:EC IPP
 Rev:F 10.11.29 as per revC dwg DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M304S20GA

304/316 .040 Sheet

Polish #4

Purchased

No

100

sf

220.3413

0.7392

~~1556~~ 105

1.6

Jm 12-8-28

Location

Loc Qty

Loc Code

001

52.4914105

121192

52.4914105

MAT020

167.849922

117933

27.3442

118400

5.3723

118964

23.2

119346

24.8

121380

48.533422

121901

38.6

Polished 122753

122753

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
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DART AEROSPACE LTD		Work Order:	07714
Description: Lower Doubler		Part Number:	D3608-1
Inspection Dwg: D3608 Rev: C		Page 1 of 1	

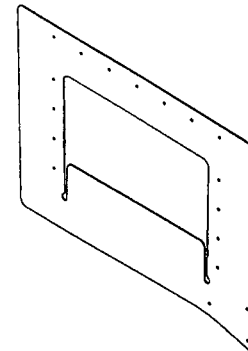
FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.004/-0.001	0.099"	-		U	mmal
1.82	+/-0.030	1.804"	-		✓	
0.50	+/-0.030	0.503"	-		✓	
11.63	+/-0.030	11.622"	-		✓	Perimeter
81.00 8.100"	+/-0.030	8.100"	-		✓	
1.350	+/-0.010	1.350"	-		✓	
2.25	+/-0.030	2.242"	-		✓	
1.81	+/-0.030	1.821"	-		✓	
3.750	+/-0.010	3.756"	-		✓	
1.250	+/-0.010	1.258"	-		✓	
8.90	+/-0.030	8.900"	-		✓	
0.400	+/-0.010	0.405"	-		✓	
1.350	+/-0.010	1.355"	-		✓	
0.345	+/-0.010	0.350"	-		✓	
1.875	+/-0.010	1.881"	-		✓	
6.73	+/-0.030	6.734"	-		✓	
2.90	+/-0.030	2.907"	-		✓	
6.98	+/-0.030	6.98"	-		✓	
1.38	+/-0.030	1.375"	-		✓	
8.44	+/-0.030	8.432"	-		✓	
0.040	+/-0.010	0.039"	-		✓	

Measured by: Jm	Audited by: DAS	Preliminary Approval:
Date: 12-8-28	Date: 2-89 1708 28	Date:


Rev	Date	Change	Revised by	Approved
A	09.05.11	New Issue	KJ	
B	10.02.18	Dimensions updated per Dwg Rev B	KJ	
C	10.12.21	Dimensions updated per Dwg Rev C	KJ	

WORK ORDER
NO. 87314 MJS
12/07/27

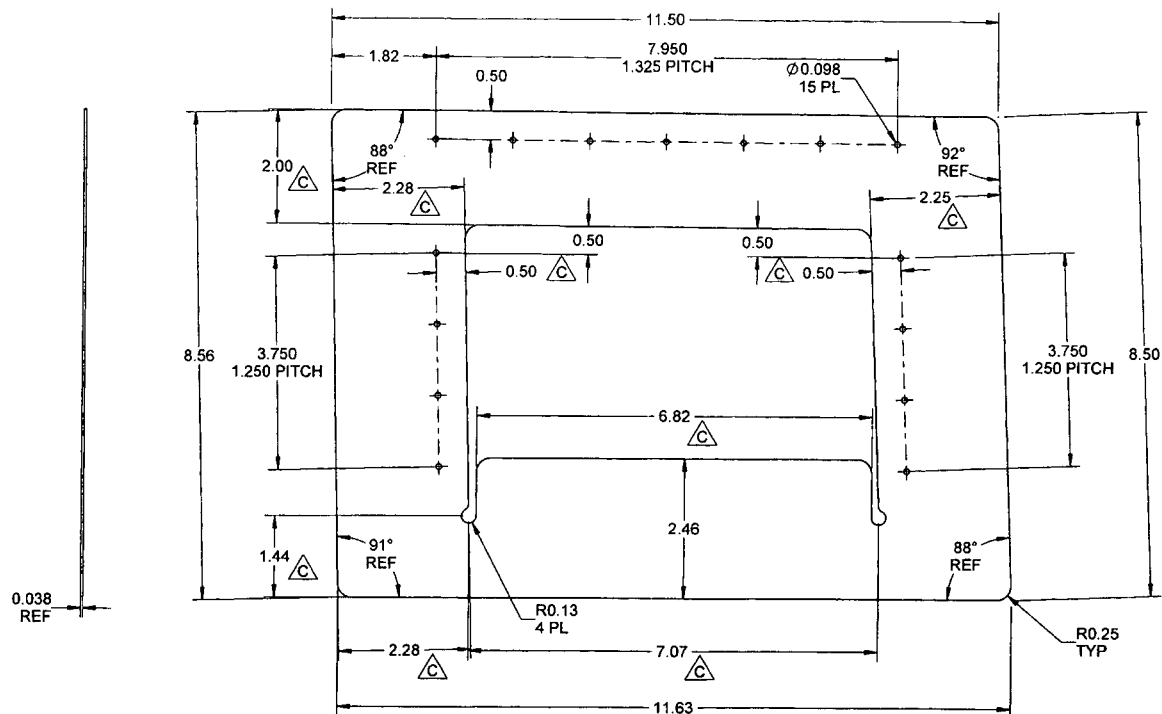


RELEASE
2010-11-23

NOTES:

- NOTES**
- 1) MATERIAL: AISI 304/316 SS SHEET, 20 GAUGE
PER MIL-S-5059, OR AMS 5513 (304) OR AMS 5524 (316)
OR ASTM A240 OR ASTM SA240
REF DART SPEC M304S20GA
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
 - 7) WEIGHT: 0.76 lbs
- 

C	OFFSET TOP AND VERTICAL EDGES OF RECTANGULAR OPENING BY 0.250 OUTWARDS; UPDATE IDENTIFICATION REFERENCE	MB	10.11.19
B	OFFSET TOP AND VERTICAL EDGES OF RECTANGULAR OPENING BY 0.250 INWARDS; LEAVING D3608-17-F3 DELETED BENDING DETAILS; REASON: D3608-17-3 NOW SOLD TO CUSTOMERS UNBENT PER PAR#09-097	MB	10.02.05
A	NEW ISSUE	MB	07.04.11
REV.	DESCRIPTION	BY	DATE
DESIGN	MB	DART AEROSPACE LTD	
DRAWN	MB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	MB	DRAWING NO.	REV.
MFG. APPR.	MB	D3608	SHEET 1 OF 1
APPROVED	MB	TITLE	SCALE
DE APPR.	MB	DOUBLER	NT:
DATE	10.11.19	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	



D3608-3 UPPER DOUBLER

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET, 20 GAUGE
PER MIL-S-5059, OR AMS 5513 (304) OR AMS 5524 (316)
OR ASTM A240 OR ASTM SA240
REF DART SPEC M304S20GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.75 lbs

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3608	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		DOUBLER	NTS
DATE	10.11.19	<small>COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

